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(71) Applicant (for all designated States except US): **NISSAN MOTOR CO., LTD.** [JP/JP]; 2, Takara-cho, Kanagawa-ku, Yokohama-shi, Kanagawa 2210023 (JP).

(72) Inventor; and

(75) Inventor/Applicant (for US only): **MATSUOKA, Naoya** [JP/JP]; 11-706, Residence Nissan Morisaki, 3-15, Yokosuka-shi, Kanagawa 2380023 (JP).

(74) Agent: **GOTO, Masaki**; Shoyu-Kaikan, 3-1, Kasumigaseki 3-chome, Chiyoda-ku, Tokyo 1000013 (JP).

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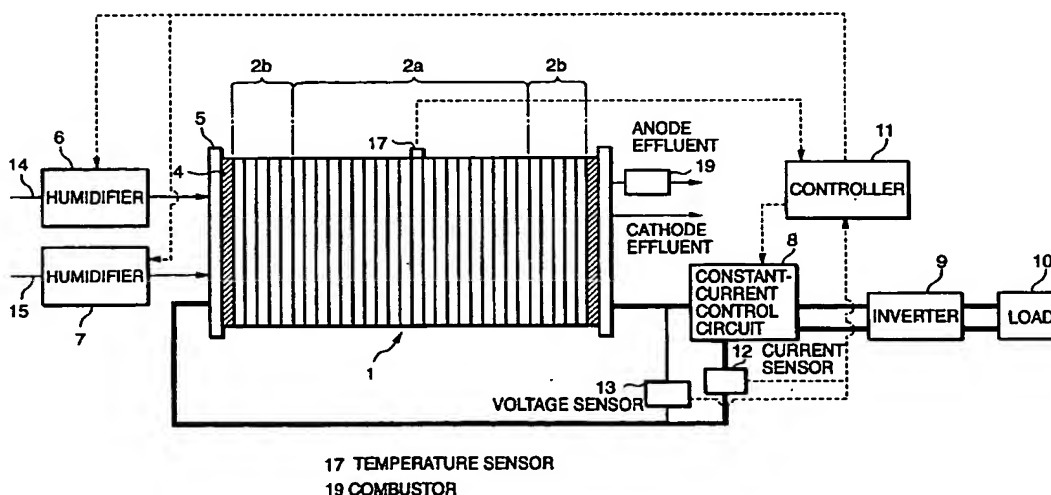
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(54) Title: PREVENTION OF FLOODING OF FUEL CELL STACK



17 TEMPERATURE SENSOR  
19 COMBUSTOR

(57) Abstract: A fuel cell stack (1) generates power by an electrochemical reaction between hydrogen and oxygen in plural stacked fuel cells (2a, 2b). Each fuel cell (2a, 2b) comprises an anode (26a) to which hydrogen is supplied, a cathode (26b) to which air containing oxygen is supplied, and an electrolyte membrane (20) which conducts hydrogen ions from the anode (26a) to the cathode (26b). The fuel cells (2a, 2b) comprise center cells (2a) and end cells (2b). By arranging the moisture absorption capacity of the end cells (2b) to be larger than that of the center cells (2a), flooding in the end cells (2b) which do not easily rise in temperature is prevented, and the low-temperature start-up performance of the fuel cell stack (1) is enhanced.

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# INTERNATIONAL SEARCH REPORT

Int lonal Application No  
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## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 H10M8/04 H01M8/24 H01M8/10

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 H01M

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ, WPI Data

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

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Y	PATENT ABSTRACTS OF JAPAN vol. 2002, no. 11, 6 November 2002 (2002-11-06) & JP 2002 208421 A (DENSO CORP), 26 July 2002 (2002-07-26) cited in the application abstract	1-33
Y	EP 0 716 463 A (TOYOTA MOTOR CO LTD) 12 June 1996 (1996-06-12) * see col. 5, 1.17 - col. 6, 1.5, col.11, 1.1 - 20, claims * the whole document	1-33
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☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax: (+31-70) 340-3016

Authorized officer

Stellmach, J

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Y	WILKINSON D P ET AL: "WATER MANAGEMENT AND STACK DESIGN FOR SOLID POLYMER FUEL CELLS" JOURNAL OF POWER SOURCES, ELSEVIER SEQUOIA S.A. LAUSANNE, CH, vol. 49, no. 1/3, 1 April 1994 (1994-04-01), pages 117-127, XP000540738 ISSN: 0378-7753 * see p.719 - p.726, water management methods * the whole document	1-33
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Information on patent family members

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